



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : **Confirmation No. 5657**  
Mitsuaki OSHIMA : Docket No. 2000\_1524  
Serial No. 09/705,844 : Group Art Unit 2634  
Filed November 6, 2000 : Examiner Dac V. Ha  
COMMUNICATION SYSTEM : **Mail Stop: RCE**

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**RESPONSE**

Commissioner for Patents  
P.O. Box 1450  
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THE COMMISSIONER IS AUTHORIZED  
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ACCOUNT NO. 20-0375

Sir:

This paper is in response to the Office Action of August 10, 2005, the period for response to which having been extended by three months to February 10, 2006.

Claims 98-109 were rejected under 35 USC § 103(a) as being unpatentable over Nakamura. This rejection is traversed for the following reasons.

Independent claims 98, 100, 104, and 106 each recite "a modulator operable to modulate (or a method of modulating) a data stream to an n-level PSK or QAM modulated signal" and that "the modulator (or modulating) is capable of changing the value of n." Similarly, independent claims 102 and 108 recite that "the value of n is changeable."

The support for the above recited features is found in the specification, page 140, line 23 to page 141, line 27. According to the present invention as shown in Fig. 120(b), the level of QAM or PSK modulation can be changed. In the examples shown in Fig. 120(b), during time slot 788a, the level (referred to as "n" in the claims) is changed to 16 for 16 QAM (see page 141, lines 3-6), or the level is changed to 64 for 64 QAM in time slot 788i (see page 141, lines 7-10), or the level is changed to 4 for 4 QAM in time slot 788r. Thus, the present invention allows the apparatuses to